

							
CAPSTONE DESIGN PROJECT							
<div data-bbox="1336 476 1992 1127"></div> <div data-bbox="1039 1189 2392 1395"><h1>College Quest</h1></div> <div data-bbox="1606 1498 1812 1558"><p>Group G</p></div>							
2023_FALL		College life simulation game					



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● Project Progress

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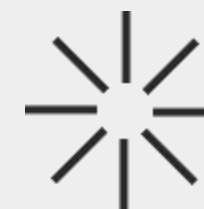
● Game Flow

● Conclusion  
- Challenges, Limitation



01

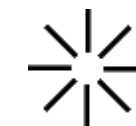
# OBJECTIVE & MOTIVATION





01

## MOTIVATION



the difficulties of college life

“mobile simulation game”코로나19로 달라진 대학생활 중 **가장 아쉬운 점**은?

What are you most dissatisfied with your college life that has changed due to COVID-19?

32%

↑ 동아리활동, 소모임 등 학업 이외 활동을 자유롭게 하지 못하는 점

Cannot freely engage in activities other than academic activities

20%

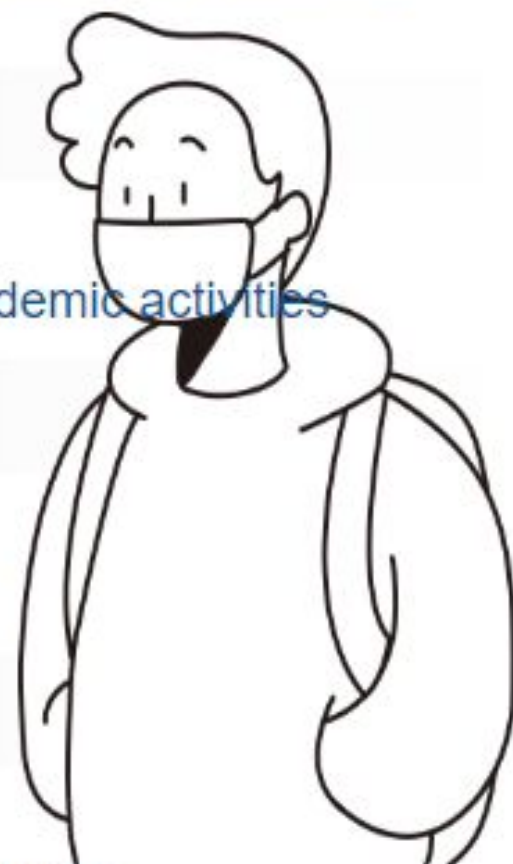
↑ 선후배, 친구와 교류가 적어진 점

Less interaction with seniors, juniors and friends

19%

↑ 도서관 등 학교 시설을 자유롭게 이용하지 못하는 점

Inability to freely use school facilities, such as libraries

전 세계 모바일 시뮬레이션 게임  
연간 다운로드, 68억 건 돌파

2020년 코로나19 팬데믹의 영향으로 전 세계 모바일 시뮬레이션 게임은 동기 대비 73% 성장하여 69억 다운로드를 돌파했습니다. 2021년부터 2022년까지 모바일 시뮬레이션 게임의 다운로드 수는 비교적 안정적인 수준을 유지하며, 68억 건을 넘어섰습니다.

2023년 1월부터 7월까지 모바일 시뮬레이션 게임 다운로드 수는 35억 건에 육박했으며, 그 중 85%는 Google Play에서 발생했습니다.

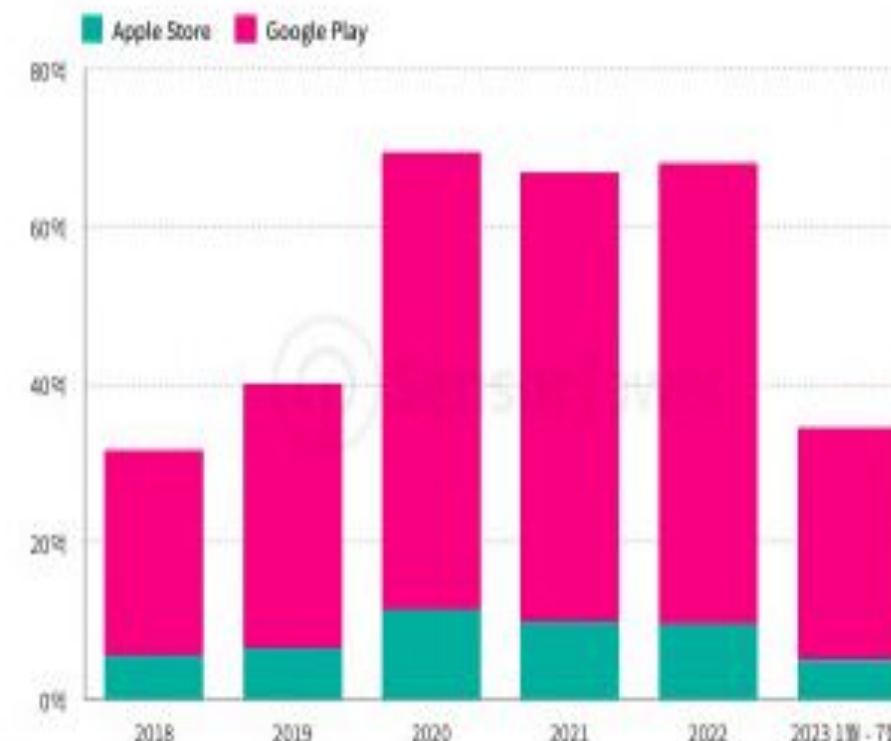
다운로드 통계에 대한 참고사항

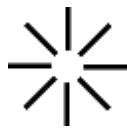
본 페이지가 집계한 데이터는 App Store와 Google Play의 다운로드 수를 기반으로 하며, 해당 데이터는 사전 다운로드, 중복 다운로드와 제3자 안드로이드 앱 마켓의 다운로드를 포함하지 않습니다. Google Play는 한국에서 사용할 수 없습니다.

참고: 2023년 7월까지 집계된 데이터입니다

데이터 출처: 센서타워 스토어 인텔리전스

전 세계 연도별 모바일 시뮬레이션 게임 다운로드 추세





# Mobile simulation game

in the form of a game

● Application for classes

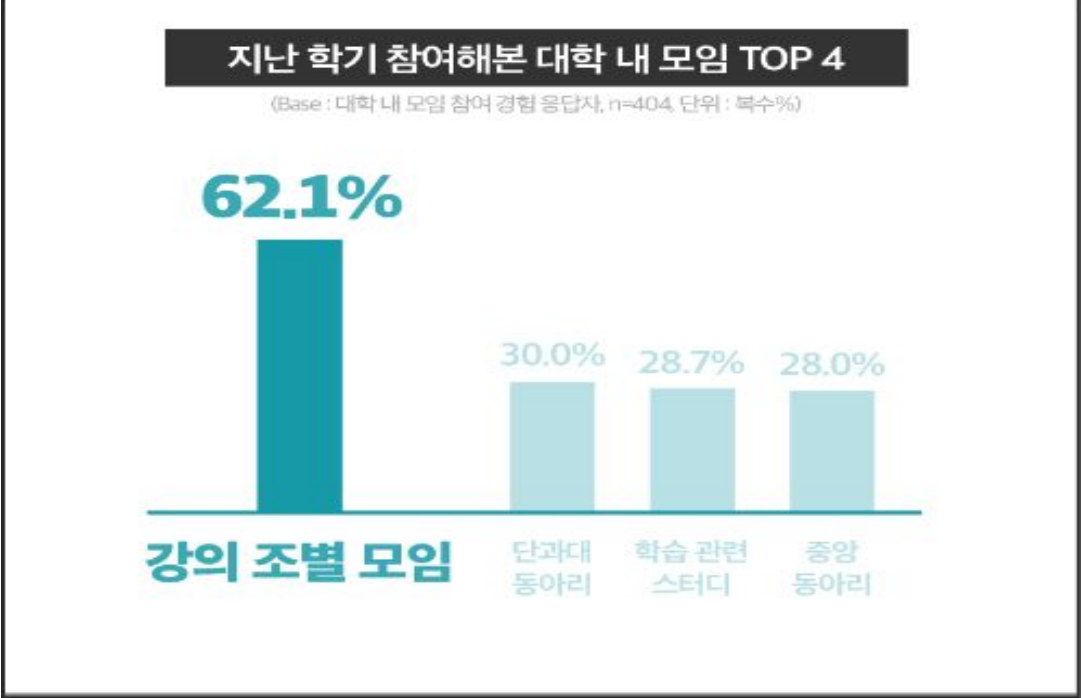
잔여 인원	이수 구분	강좌코드	교과목명	학점	담당교수	강의시간/강의실	강의 구분
0	01	A1978703	신입생세미나	1.0		수 13:30-14:20 (청403)	
0	01	A1978704	신입생세미나	1.0		목 13:30-14:20 (청502)	
0	01	A1978705	신입생세				
0	01	A4683201	리더십합				
0	01	A4683202	리더십합				영어
74	01	A4689801	사회봉사				
0	01	A5939101	대학전공계				
0	01	A5939201	미래와미	2.0		화 12:00-13:50 (청207)	

웹 페이지의 메시지

수강인원이 초과 되었습니다.

확인

● Club activities & Group projects



● Employment preparation

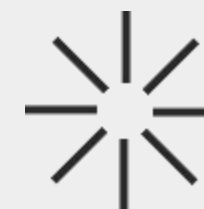






02

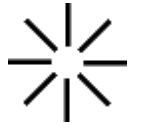
# PROJECT PROGRESS





02

## ROLE ASSIGNMENT



김다정

- **Arts**
- Mini-game Development
- Testing

김서연

- **Framework**
- Mini-game Development
- Testing

박종익

- **Scripting**
- Mini-game Development
- Testing

하예솜

- **UI Design**
- Mini-game Development
- Testing

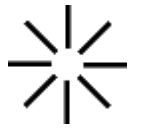
[illegible]





02

## TECHNOLOGY STACK



collaboration



design

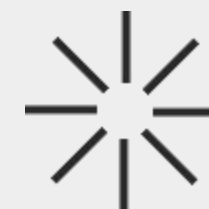


game development



03

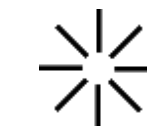
# GAME FLOW





03

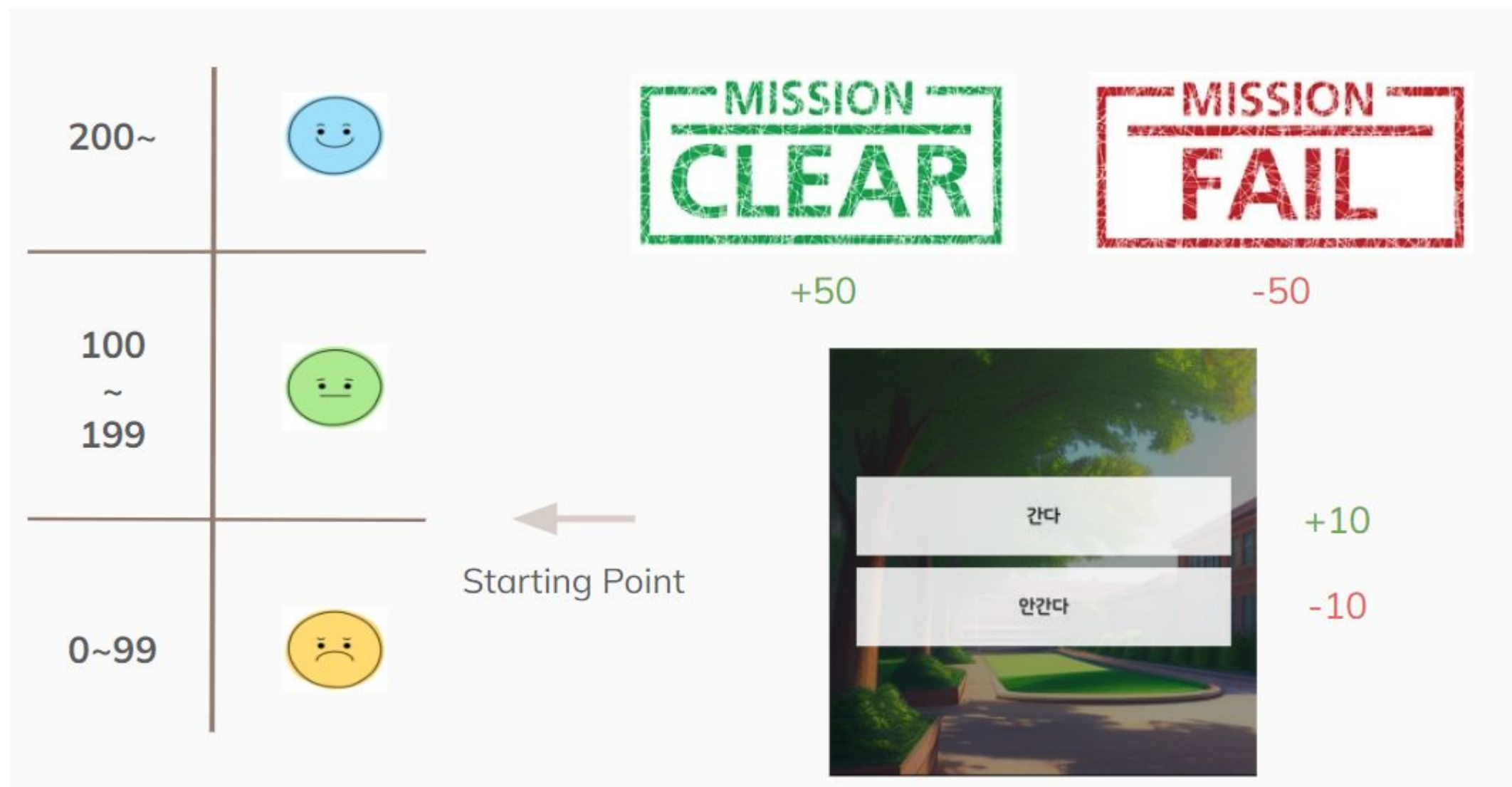
## MENTAL INDEX

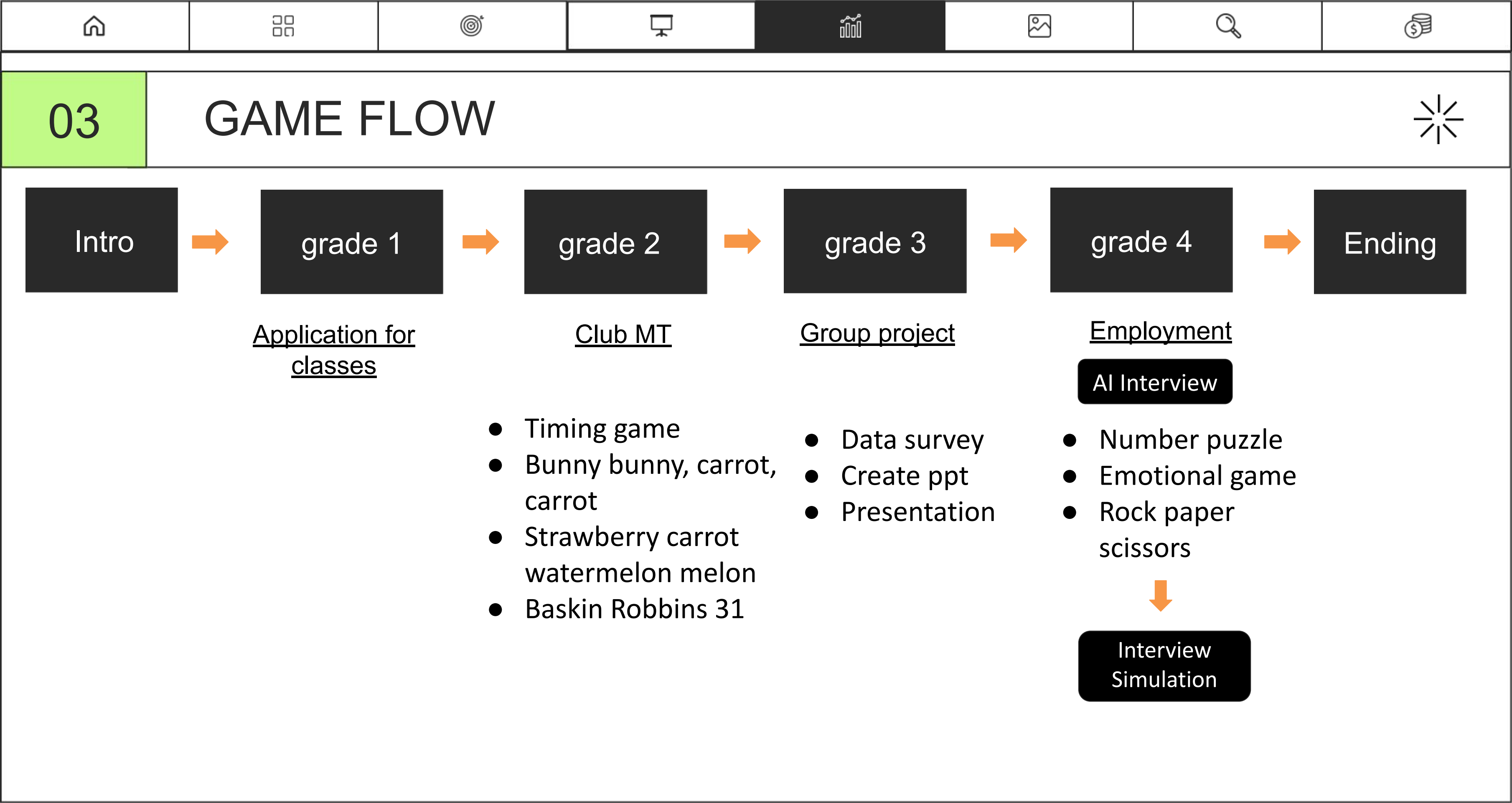


- When selecting the appropriate option
- If you win a mini game



Various ending according to the mental index

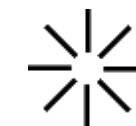






03

## Ending Scenario



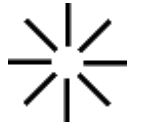
Scenario	Mental index	Interview	Ending phrase
1	good	pass	“열심히 노력한 보람이 있네! 행복한 직장 생활의 시작!” "Your hard work paid off! The beginning of a happy working life!"
2	average	fail	“평범한 듯 특별한 순간, 새로운 시작” "A normal and special moment, a new start"
3	bad	pass	“힘든 길이지만, 내가 꺾을 수 있어.” "It's a tough road, but I can beat it."
4	good	fail	“막다른 길이 아니야, 새로운 가능성의 문이 열렸어.” "It's not a dead end, the door to new possibilities has opened."
5	average	pass	“작은 시작이 큰 꿈을 이루는 계기일지도 몰라.” "A small start may be the trigger for a big dream."
6	bad	fail	“두려움이 있어도, 새로운 시작은 언제나 가능해.” "Even with fear, a new beginning is always possible."





03

## Ending Scenario



1



2



3



4



5



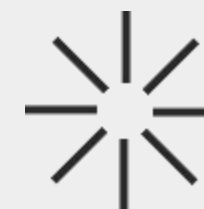
6





04

# FINAL DESIGN

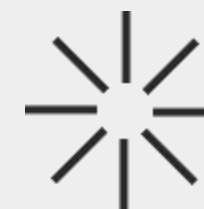






05

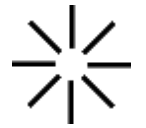
# IMPLEMENTATION & DEMO





05

## Implementation - Dialogue System



CSVConverter

Converts CSV file into  
Dictionary<string,  
List<Dialogue>>

GetDialogues



DialogueController

Set Dialogue UI  
(Textbox, character  
image, character name,  
text, ... )

DialogueUtils

- Return next dialogue
- Skip dialogues

**class Dialogue**

- string type;
- string name;
- string action;
- string nextCategory
- int mentalIndex

StageManager

Request to start  
dialogue on certain  
event

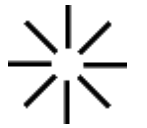
StartDialogue(string category)





05

## Implementation - Save and Load



```
class GameData
- string userName;
- int mentalIndex;
- int progress
```

DataController

SaveData() :  
Convert GameData into  
json file and save the  
file

LoadData() :  
Convert json file into  
GameData

After each  
stage

On game  
start



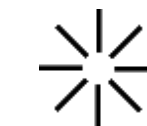
Newtonsoft.Json





05

# 1\_Intro



Intro

grade 1

grade 2

grade 3

grade 4

Ending

Application for  
classes

Club MT

Group project

Employment

AI Interview

- Timing game
- Bunny bunny, carrot, carrot
- Strawberry carrot watermelon melon
- Baskin Robbins 31

- Data survey
- Create ppt
- Presentation

- Number puzzle
- Emotional game
- Rock paper scissors

Interview  
Simulation

Demo

>> Skip



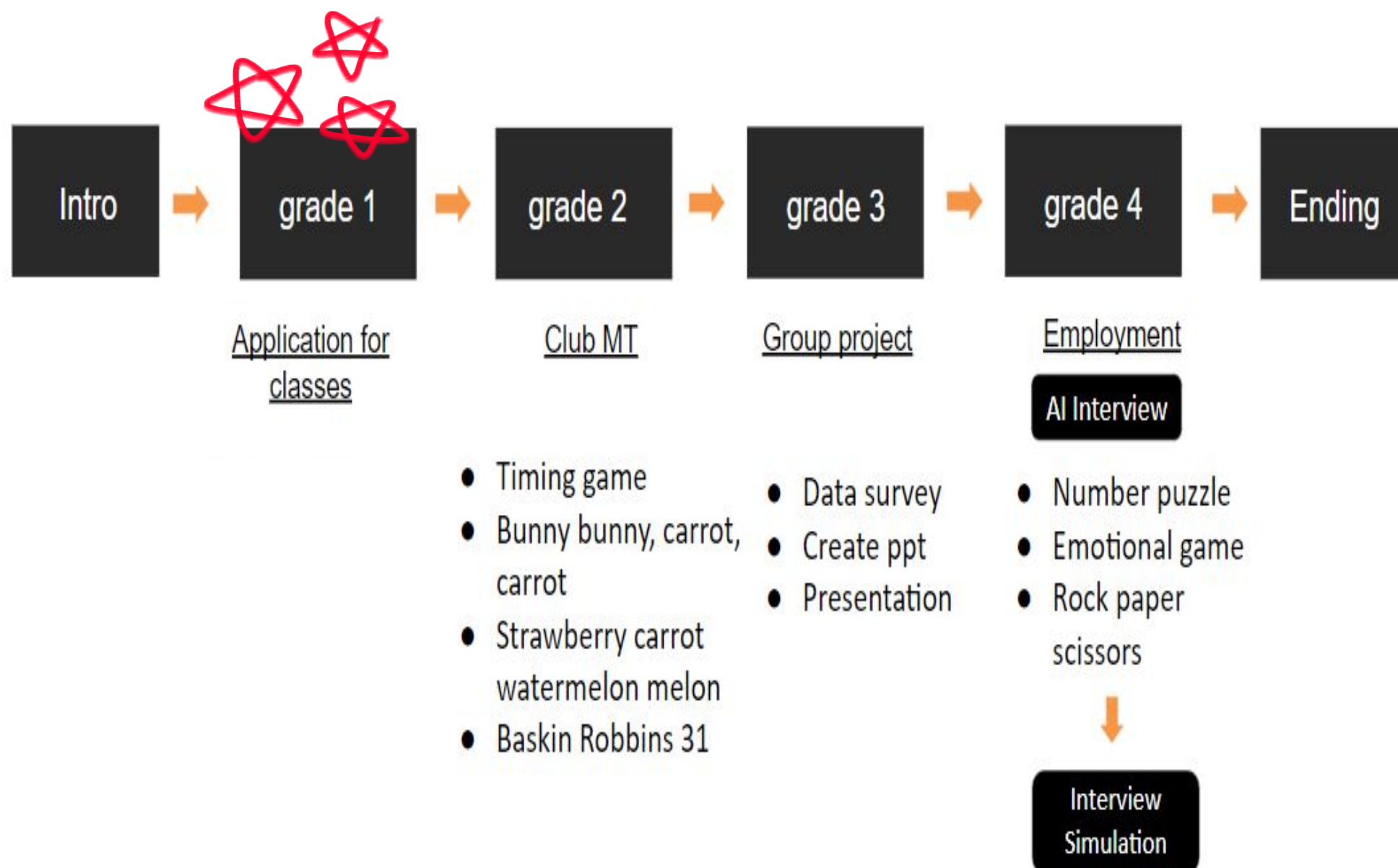
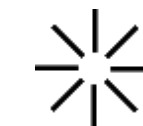
(벌써 4학기째 지내고 있는 나와 절친. 이제는  
대학생활에 대하여 아무런 감흥이 없다.)





05

## 2\_MiniGame\_Grade1

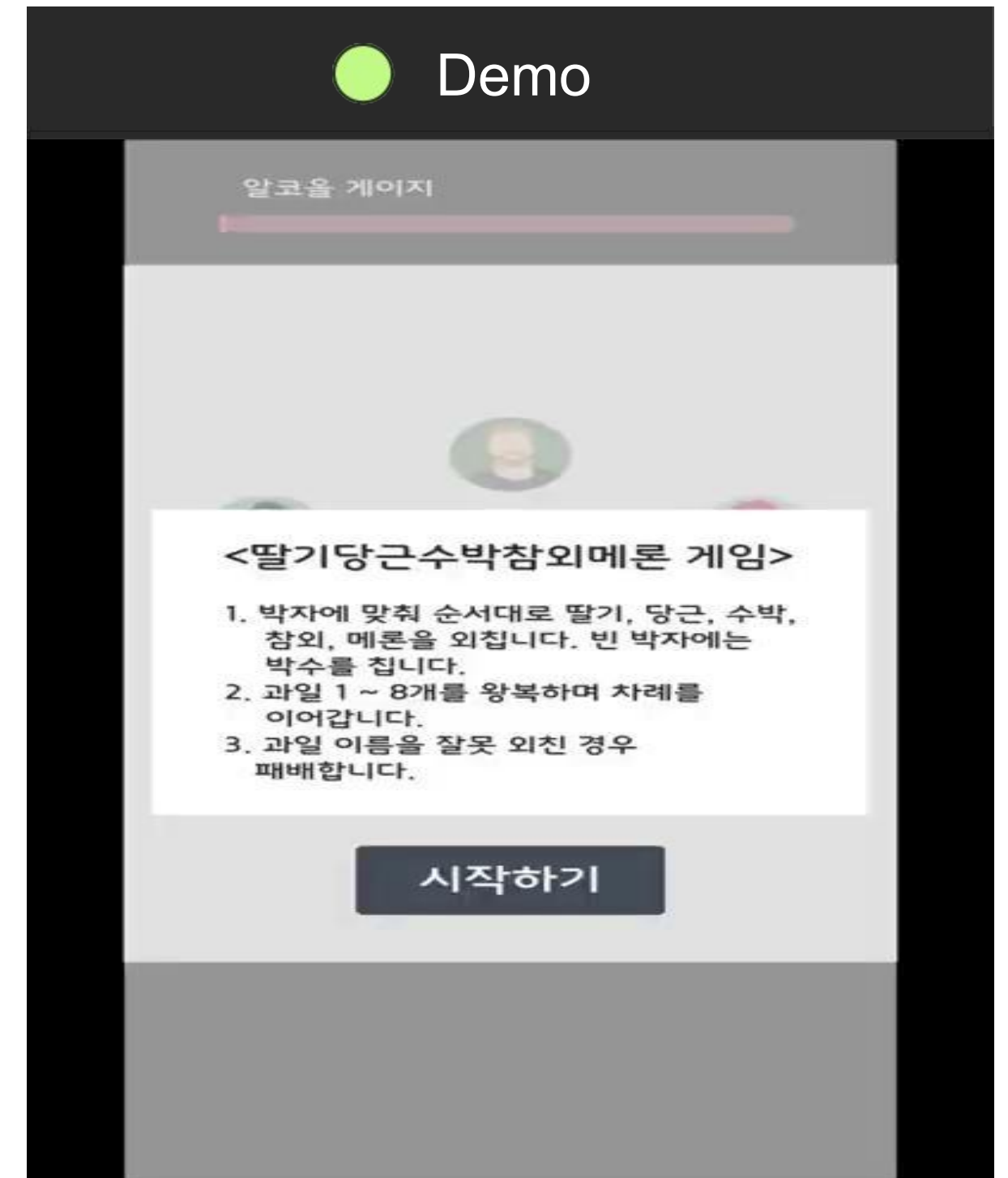
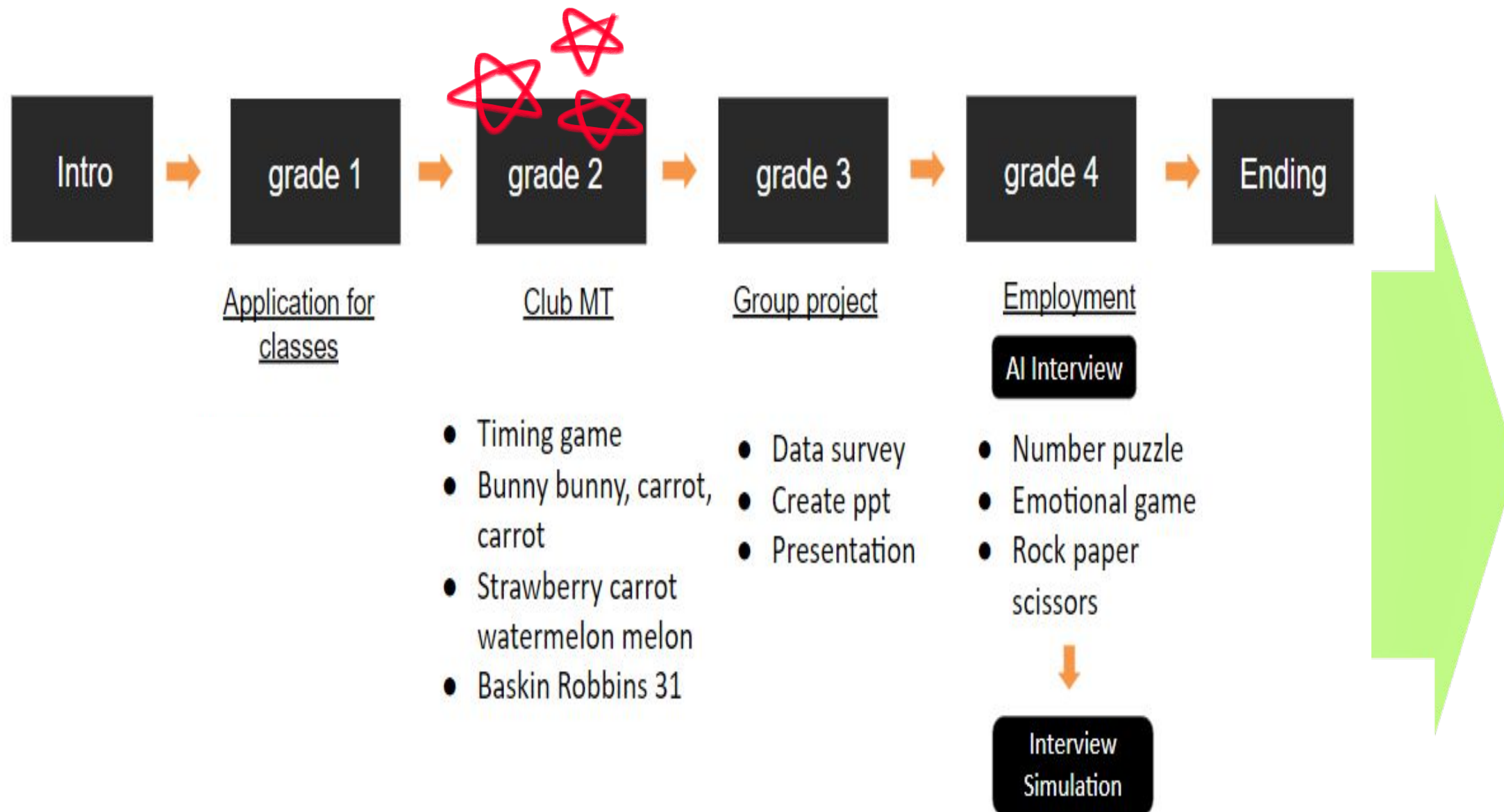
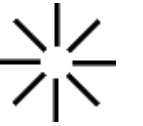


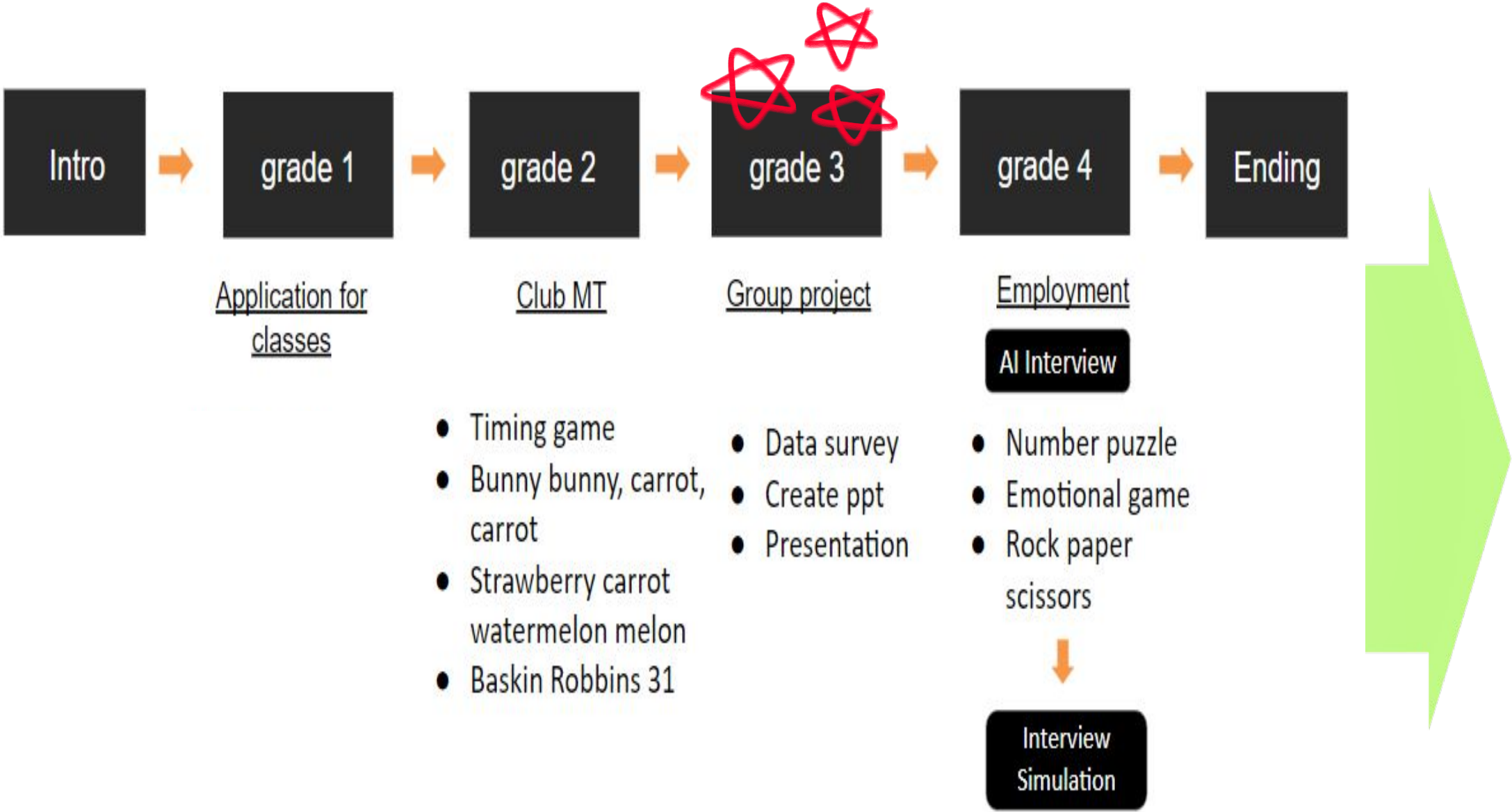
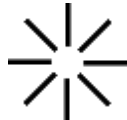
● Demo

09:59:59		
신청과목 1	월 1:30~2:45 수 12:00~1:15	신청
신청과목 2	월 3:00~4:15 수 4:30~5:45	신청
신청과목 3	화 12:00~1:15 목 1:30~2:45	신청
신청과목 4	화 1:30~2:45 목 12:00~1:15	신청
신청과목 5	월 12:00~1:15 수 1:30~2:45	신청
신청과목 6	금 12:00~2:45	신청

05

## 2\_MiniGame\_Grade2





 Demo

홈페이지

기사

논문

**<Step 1. 자료조사>**

1. 홈페이지, 논문, 기사에서 핵심 문장을 찾아 클릭하여 하이라이트 합니다.  
2. 모든 자료에 대한 조사를 완료하면 다음 스테이지로 넘어갑니다.

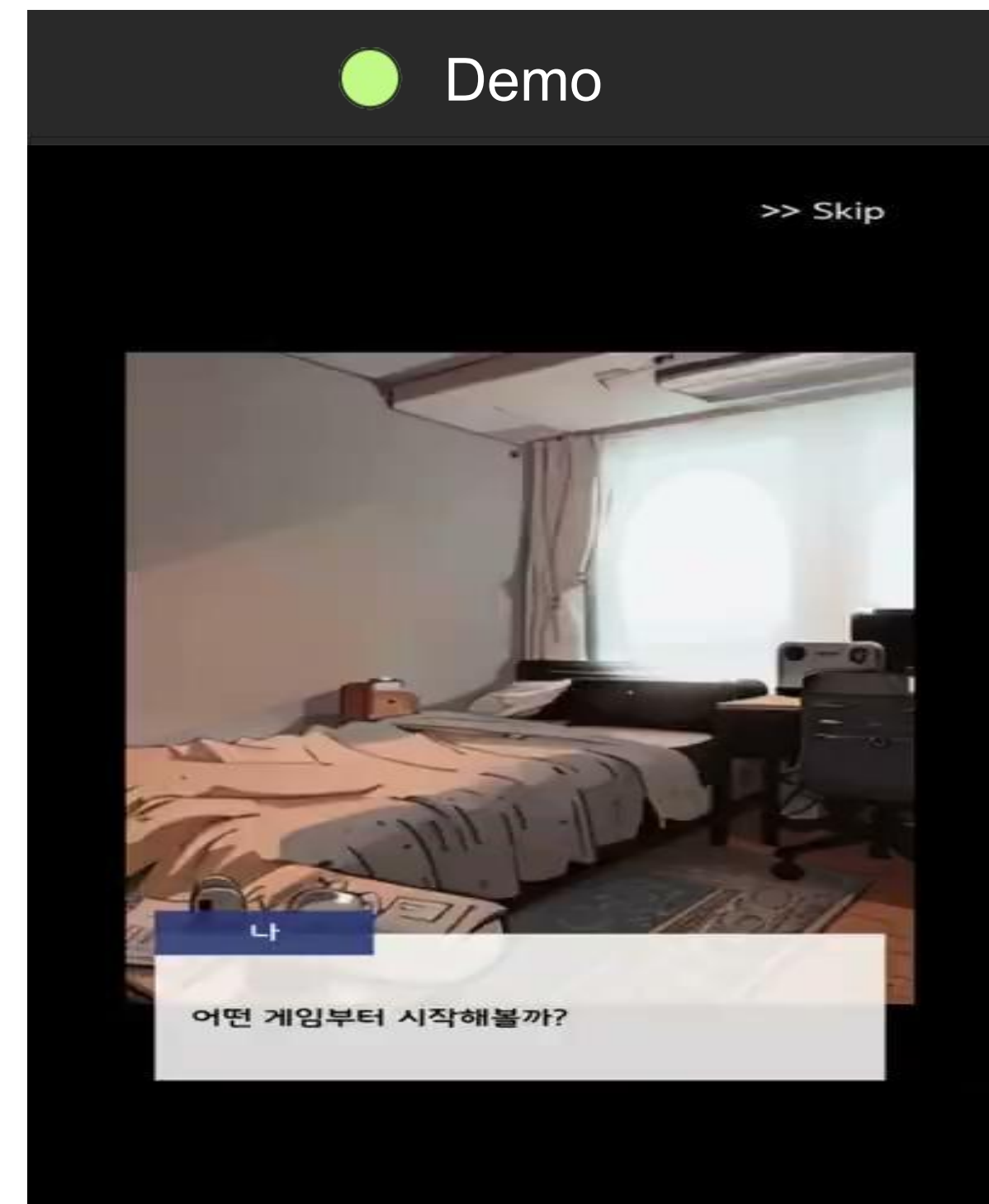
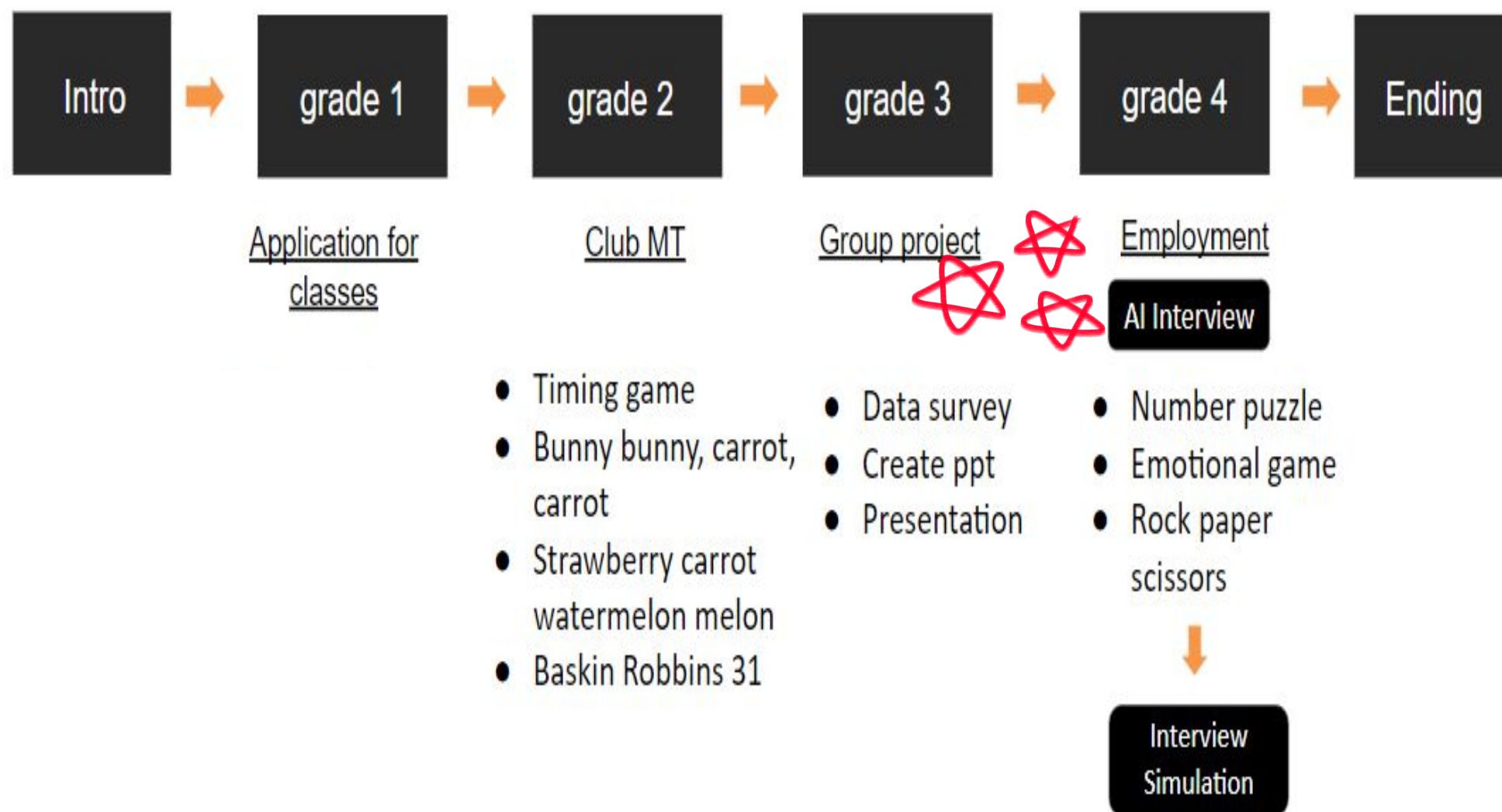
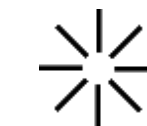
시작하기





05

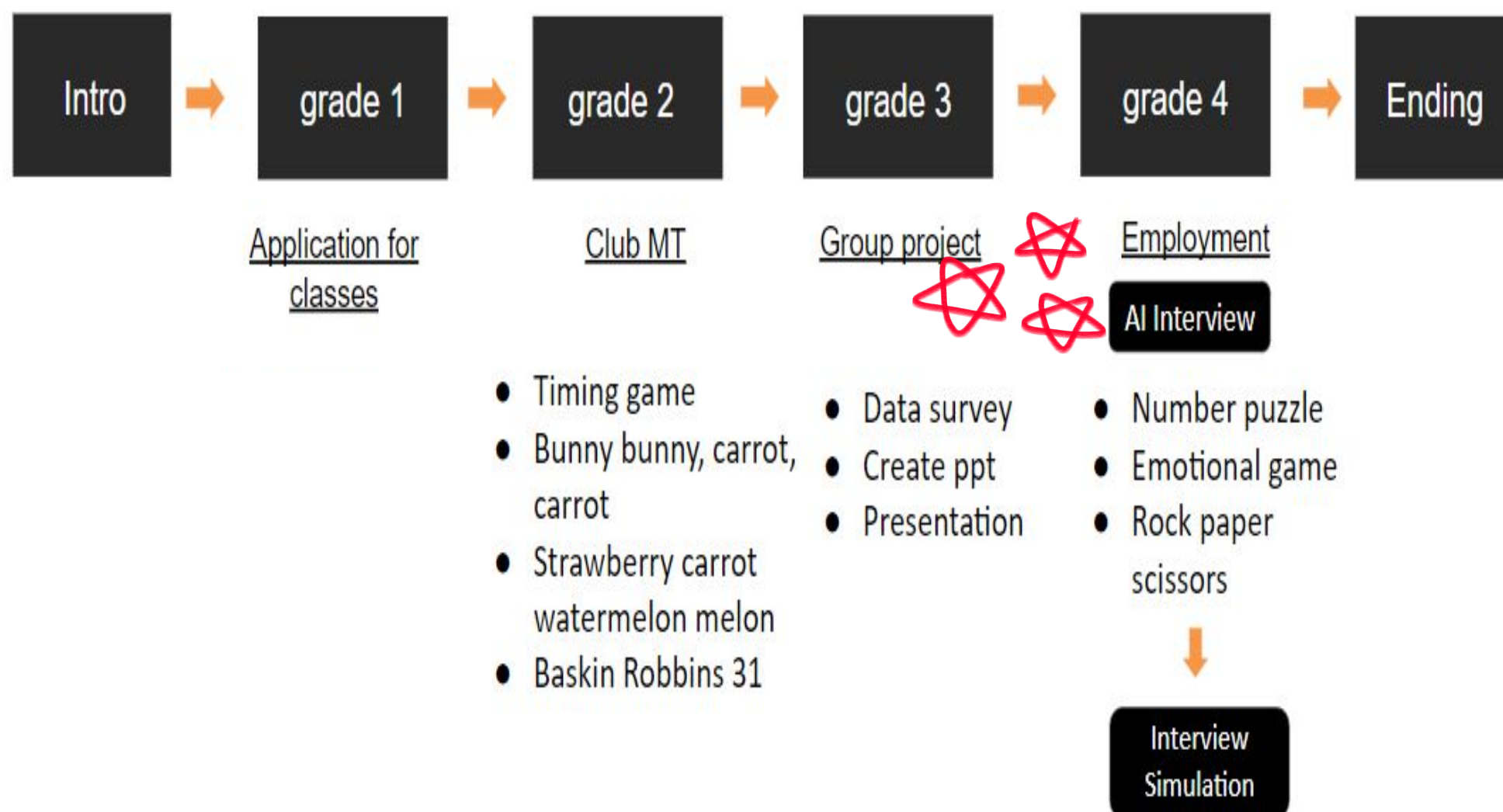
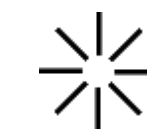
## 2\_MiniGame\_Grade4\_AIGame\_Number puzzle





05

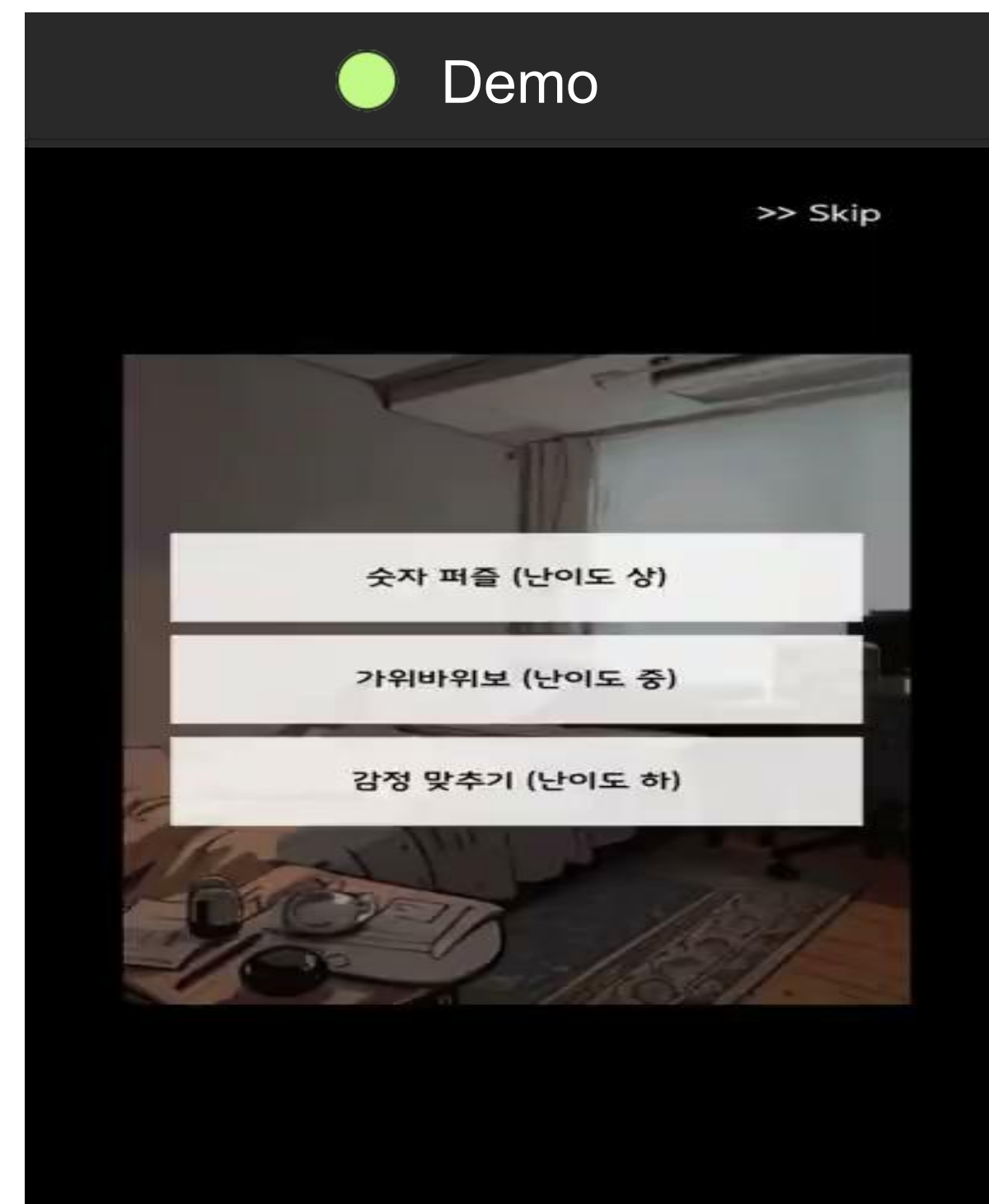
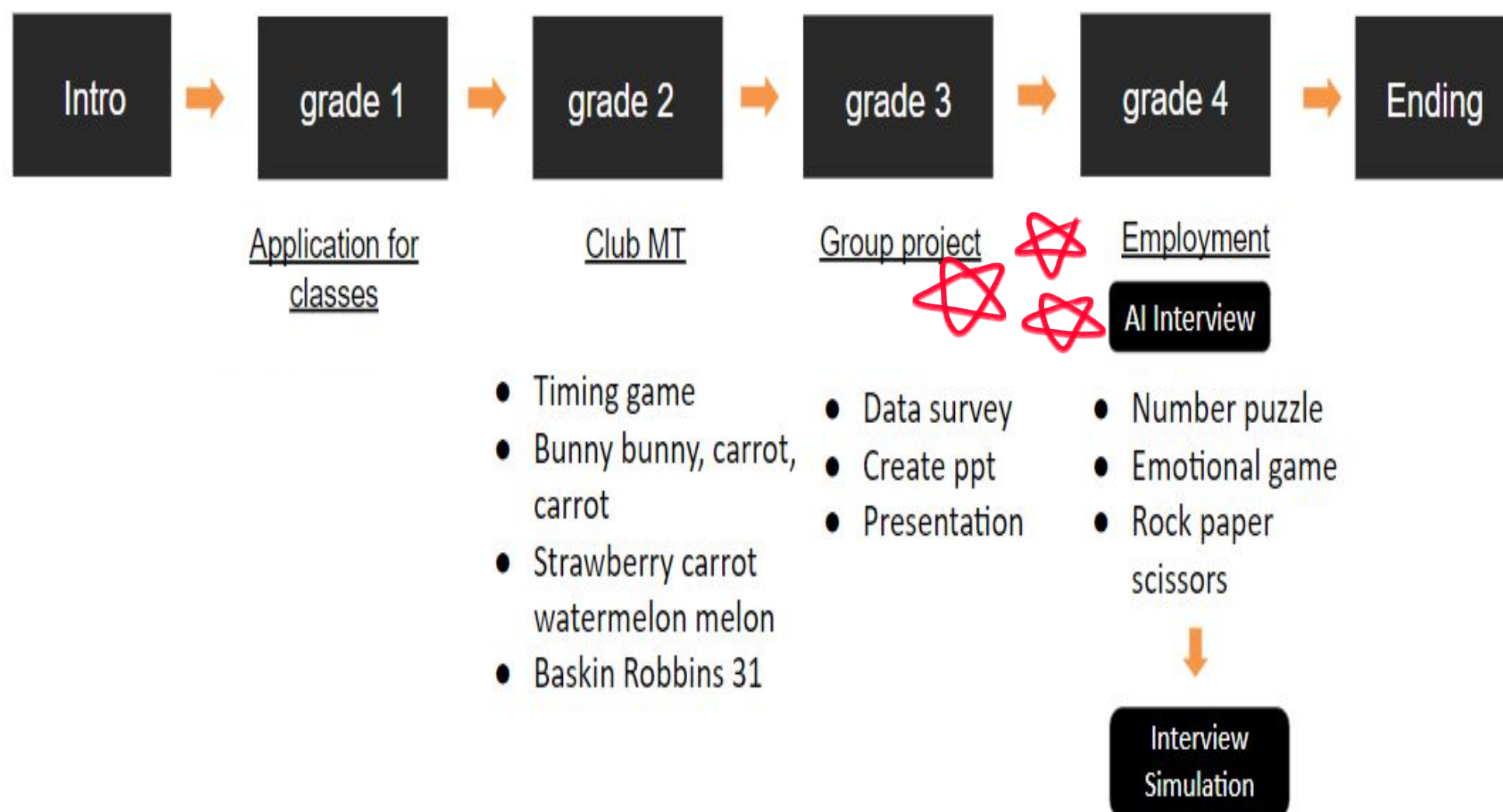
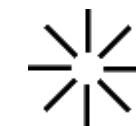
## 2\_MiniGame\_Grade4\_AIGame\_Emotional game





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## 2\_MiniGame\_Grade4\_AIGame\_Rock paper scissors

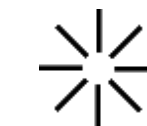






05

## 2\_MiniGame\_Grade4\_Interview Simulation



Application for  
classes

Club MT

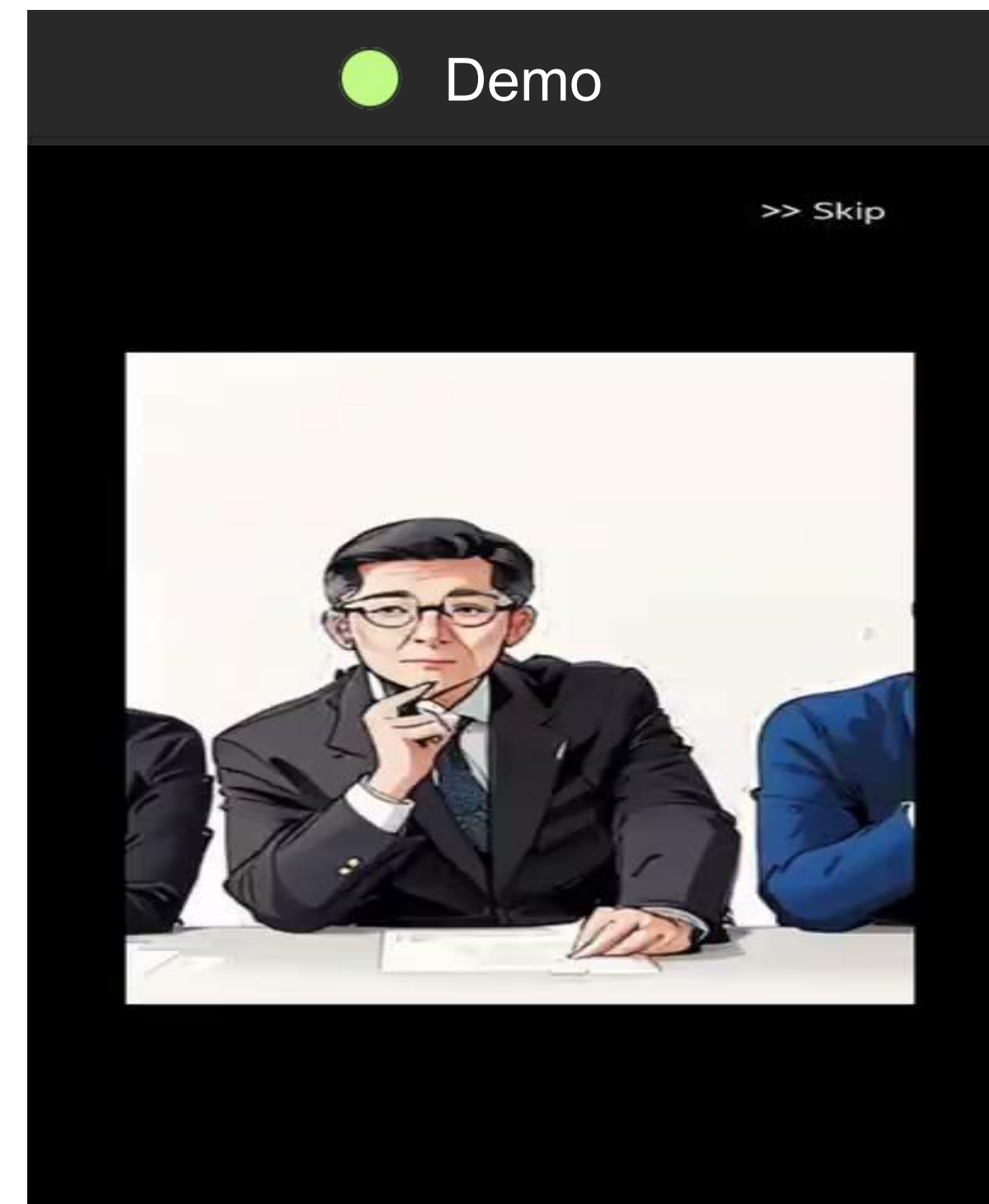
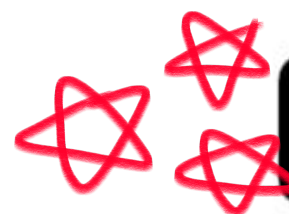
Group project

Employment

AI Interview

- Timing game
- Bunny bunny, carrot, carrot
- Strawberry carrot watermelon melon
- Baskin Robbins 31
- Data survey
- Create ppt
- Presentation
- Number puzzle
- Emotional game
- Rock paper scissors

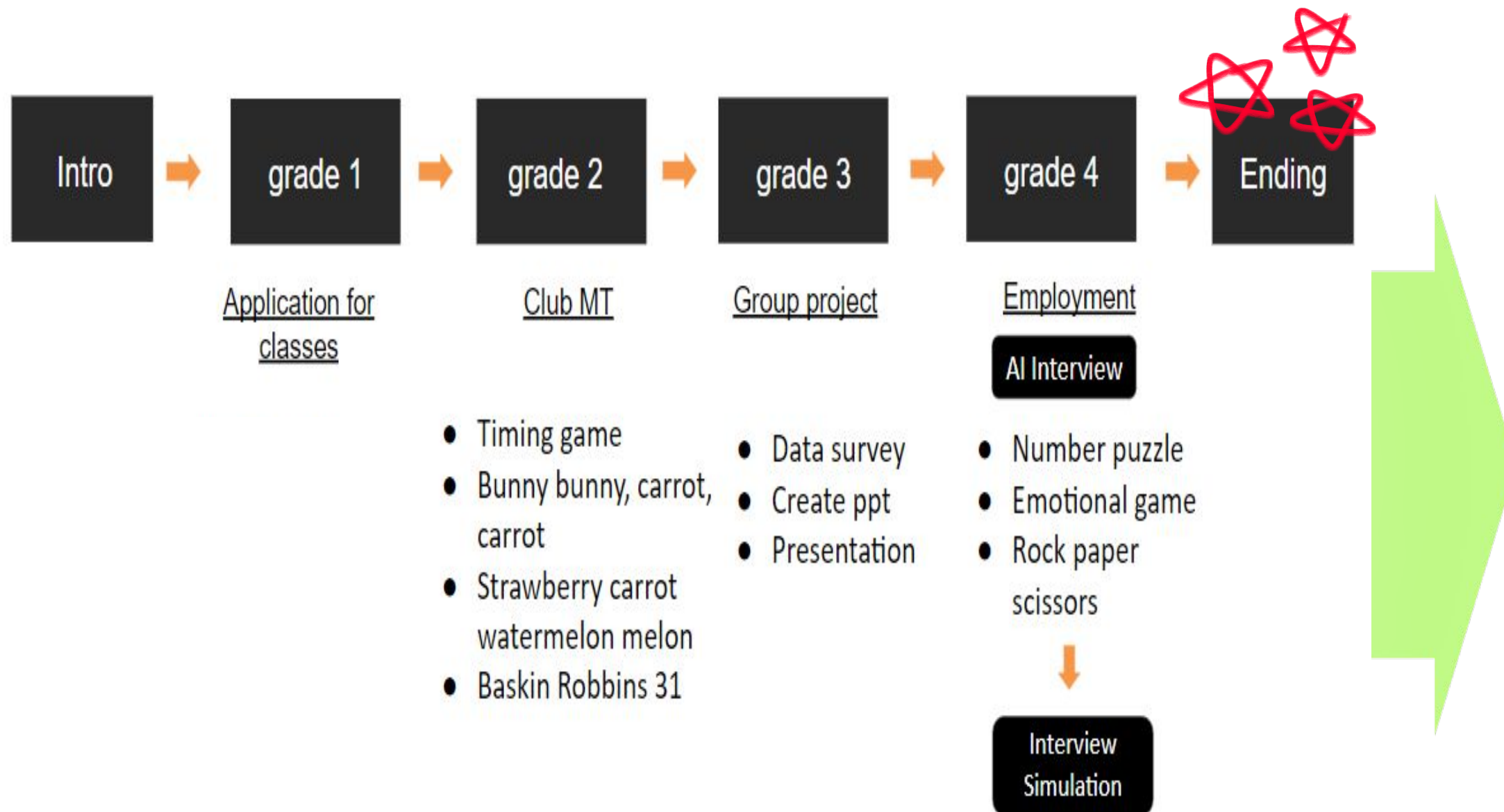
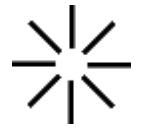
Interview  
Simulation





05

## 3\_Ending

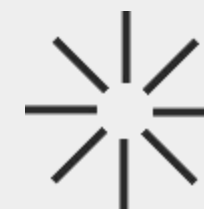


● Demo





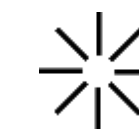
# 06 CONCLUSION





05

## CHALLENGES



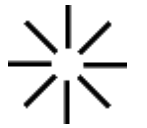
- Many team members are **less familiar with Unity**, so game development took longer than expected  
-> Self-study by rescheduling the overall schedule, and conduct active discussions
- **Absence of an art design major**  
-> Use AI image creation tool
- It was difficult to get the **desired image accurately** with the AI image creation tool  
-> Using the method of taking a specific image and entering it into the AI





05

## LIMITATION



- **limited expression**
  - Difficulty putting all the situations students experience in the game
- **Difficulty with detailed implementation**
  - Game implementation is a large-scale project game that considers many factors such as game concept, storytelling, art, and music



# THANKS!



## PROJECT MEMBERS

프로젝트 멤버

김다정  
김서연  
박종익  
하예솜

## PROJECT PERIOD

프로젝트 기간

2023.9. ~ 2023.12.